

## I. AMENDMENTS

### AMENDMENTS TO THE CLAIMS

Cancel claim 5 without prejudice to renewal.

Please enter the amendments to claim 1, as shown below.

1. **(Currently amended)** A method for diagnosing Alzheimer's Disease (AD) in a living individual, the method comprising detecting a level of carboxyl-terminal truncated apolipoprotein E (apoE) in an aqueous biological sample from the individual, wherein the carboxyl-terminal truncated apoE comprises amino acids 244-260 of apoE, and wherein the carboxyl-terminal truncated apoE is a form such that a level of the carboxyl-terminal truncated apoE that is significantly higher than the level present in a normal control indicates that the individual has AD.

2. (Original) The method of claim 1, wherein the biological sample is blood.

3. (Original) The method of claim 1, wherein the biological sample is serum.

4. (Original) The method of claim 1, wherein the carboxyl-terminal truncated apoE has a molecular weight of about 14-20 kDa.

5. **(Cancelled)**

6. (Original) The method of claim 1, wherein apoE is apoE4.

7. (Original) The method of claim 1, wherein apoE is apoE3.

8. (Original) The method of claim 1, wherein apoE is a mixture of apoE3 and apoE4.

9. (Canceled)

10. (Previously presented) The method of claim 1, further comprising detecting a level of full length apolipoprotein E (apoE) in the biological sample from the individual; wherein a ratio of the level of carboxyl-terminal truncated apoE compared to the level of full length apoE in the biological sample that is greater than a

ratio associated with a control biological sample from an individual not having Alzheimer's Disease is indicative of a diagnosis of Alzheimer's Disease.

11. (Previously presented) The method of claim 10, wherein the carboxyl-terminal truncated apoE has a molecular weight of about 14-20 kDa.

12. (Previously presented) The method of claim 10, wherein a ratio of the level of carboxyl-terminal truncated apoE compared to the level of full length apoE in the biological sample that is at least 25% greater than a ratio associated with a control biological sample from an individual not having Alzheimer's Disease is indicative of a diagnosis of Alzheimer's Disease.

13. (Previously presented) The method of claim 10, wherein a ratio of the level of carboxyl-terminal truncated apoE compared to the level of full length apoE in the biological sample that is at least 50% greater than a ratio associated with a control biological sample from an individual not having Alzheimer's Disease is indicative of a diagnosis of Alzheimer's Disease.

14. (Previously presented) The method of claim 10, wherein a ratio of the level of carboxyl-terminal truncated apoE compared to the level of full length apoE in the biological sample that is at least 2-fold greater than a ratio associated with a control biological sample from an individual not having Alzheimer's Disease is indicative of a diagnosis of Alzheimer's Disease.

15. (Withdrawn) A kit for diagnosing Alzheimer's Disease, the kit comprising an antibody that binds to carboxyl-terminal truncated apolipoprotein E (apoE) and instructions for using the antibody for diagnosing Alzheimer's Disease.

16. (Withdrawn) The kit of claim 15, further wherein the antibody is attached to a solid support.

17. (Withdrawn) The kit of claim 15, further comprising an antibody that specifically binds to a carboxyl-terminal portion of full-length apoE.

18. (Withdrawn) The kit of claim 15, wherein the instructions for the diagnosis of Alzheimer's Disease direct the use of the kit to detect carboxyl-terminal truncated apoE in serum.

19. (Previously presented) The method of claim 1, wherein the biological sample is plasma.

20. (Previously presented) The method of claim 1, wherein the biological sample is cerebrospinal fluid.

21. (Withdrawn) The kit of claim 17, wherein the antibody that specifically binds to a carboxyl-terminal portion of apoE binds specifically to an epitope within amino acids 270-299 of apoE.

22. (Withdrawn) The kit of claim 16, wherein the solid support is a test strip.